

DETAILED ACTION

This is a final Office action. Claims 1-7, 9, 11, 14 and 17-20 are pending and examined below. Claims 8, 10, 12, 13, 15 and 16 have been cancelled.

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "flanges extending generally parallel to the transparent pane" per claim 1, line 18 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional

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replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 recites the limitation drawn to "flange unit[s]" in line 3 and "flanges" in line 18. It is unclear if these are the same or different "flanges" or "flange units" based upon the disclosure. See rejection below for examiner's interpretation of the limitation.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 7 and 9 are rejected under 35 U.S.C. 103 as being unpatentable over Stark (U.S. Patent No. 4,259,818) in view of La See (U.S. Patent No. 4,550,542).

Claim 1: Stark discloses a window panel comprising first and second flange units (Fig. 5: 22a, 20a, respectively) each

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comprising a preassembled rectangular frame (Fig. 1, generally), sash elements (32a, 28a, "C" and "D" from attached Fig. 5 below respectively) that extend into the opening to capture a transparent pane (42a), at least one retention member (52a) attached to the first flange unit and extending into the opening, the member is beyond a position of the pane with respect to the first flange unit when positioned between the sash elements (it is beyond a position of the pane in the direction between the pane and the frame opening 62a) to grip a sill surface (64a) to retain the first flange unit (22a) and the sash element in position for assembly, the retention member has an end (see "A" from attached Fig. 6 from Stark, below) unobstructed by the first flange unit when the unit is in position for assembly, and at least one fastener (15a) adapted to draw the first and second flanges and the sash elements together against the pane, the sash elements include flanges extending generally parallel ("C" and "D") to the pane when captured therebetween, the ends of the flanges can flex inwardly spring biased sharp edge portions (see "B" from attached Fig. 5 from Stark, below, and the edge portions are spring-biased via fastener, 15), and the elements include flanges (20a) extending generally parallel to the pane are spring biased via fastener (15a) in contact with the pane and the edge portion would embed

in the pane when the pane is in a semi-molten state. The language "wherein said sharp edge...semi-molten in fire" lines 13 and 14 are steps that relate to a desired result and the examiner contends that as a glass pane becomes molten, it will inherently soften which would result in virtually anything imbedding in the pane if a force (such as a spring bias against the sharp edge) were applied to it. Regarding the limitation "preassembled", the limitations are drawn to method steps and only the final product, the apparatus, is provided patentable weight. The embodiment of Figure 5 from Stark does not disclose a spike as claimed, but the embodiment in Fig. 6 discloses a spike portion (65, 66) that affixes the first end to a core material of a sill surface (as shown), and the spike can be driven into the core material by impact of a hammer if desired. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use the member in Fig. 6 with the member in Fig. 5 as a matter of functional equivalence that would perform equally as well.

In addition, while Stark discloses frame units that are connected, it does not disclose the units are connected by welds. La See discloses a window unit for a door with frame members connected by welds (48: col. 4, lines 60-68). It would have been obvious at the time the invention was made to a person

having ordinary skill in the art to use welds to connect the frame members because welds among frame members are well known in the art for connections and would be well within the level of skill in the art with the frame in Stark.

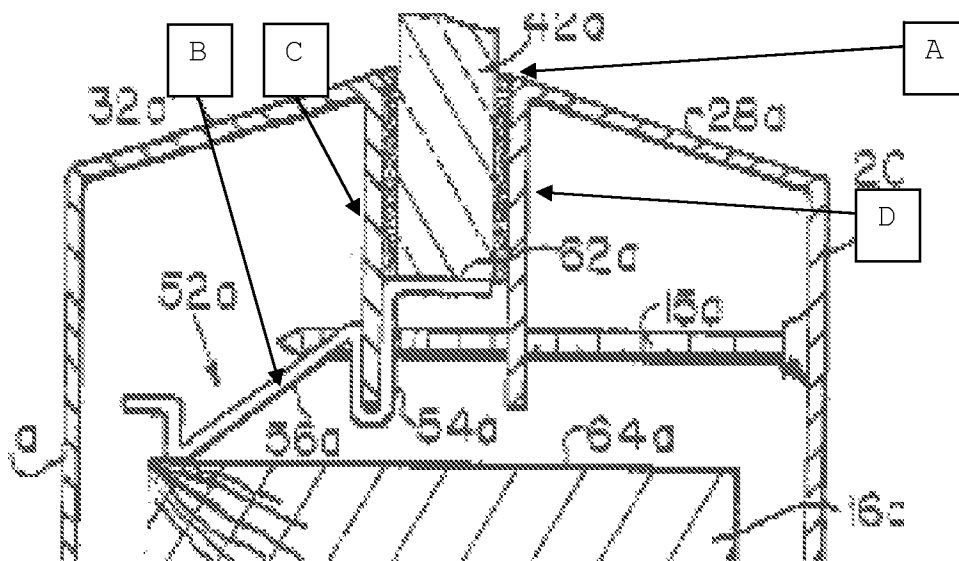


Figure 5 from Stark

Claim 7: the opening is rectangular (Fig. 1) having four sill surfaces and the vision panel has four retention members (see Fig. 4, generally), attached indirectly to the first flange unit and extending into the opening to grip all four sill surfaces.

Claim 9: a surface of the retention member (62a) supports edges of the pane.

Claims 1 and 3-6 are rejected under 35 U.S.C. 103 as being obvious over Plym (U.S. Patent No. 1,157,900) in view of La See (U.S. Patent No. 4,550,542) and Petta (U.S. Patent No. 5,987,826).

Claim 1: Plym discloses a vision panel for assembly in an opening (as shown) a first and second flange unit (see "Q" and "R" from attached Fig. 4 from Plym below) sash elements ("S" and "T" below) that extend into the opening from the flange units to capture the pane, a retention member (4) attached to the first flange unit that extends beyond a position of the transparent pane with respect to the first flange unit when positioned between the sash elements, the retention member has an end (proximate 4) unobstructed by the first flange unit when the first flange unit is in position for assembly, a spike ("U" below) positioned on the first end to affix the first end to a core material (1) a fastener (7) adapted to draw the flange units and sash elements together against the pane (10) and the sash elements include flanges (proximate actual portion 18) extending generally parallel to the pane, the ends are flexible and provide spring-biased sharp edge portions (e.g. corner portion proximate 18 is a sharp edge) in contact with the pane

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and the portion would embed in the pane if the pane became semi-molten in a fire.

While Plym discloses a spike ("U") it does not disclose the spike is positioned to be driven by an impact of a hammer, as it is a screw. Petta discloses that it is known in the art to attach frame members to an opening using nails (Col. 5, lines 37-45). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use a nail in place of the screw, as the two are functionally equivalent and would perform equally as well.

Further, while it is well known in the art that frame members are typically rectangular, Plum does not disclose that the members are attached via a weld. La See ('542) discloses a window unit for a door with frame members connected by welds (48: col. 4, lines 60-68). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use welds to connect the frame members because welds among frame members are well known in the art for connections and would be well within the level of skill in the art with the frame in Plym.

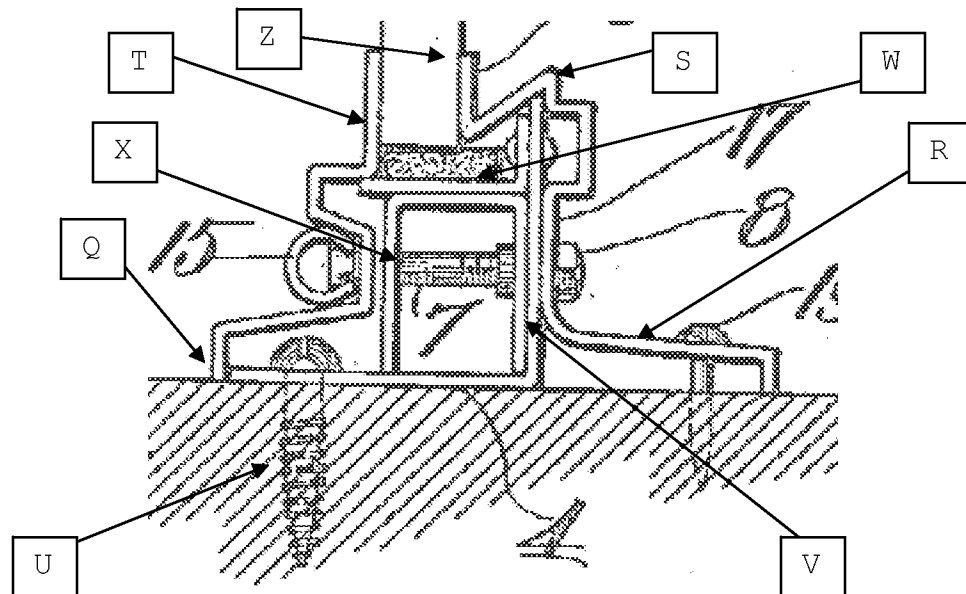


Figure 4 from Plym

Claim 3: the fastener (7) is a threaded fastener, and the second flange unit includes a hole (as shown) for receiving the threaded fastener and the retention member includes a socket (8) that can receive an end of the threaded fastener as it passed through the hole.

Claim 4: the socket is attached to the retention member by a spring element (it is indirectly attached via member "V" above) allowing movement of the socket toward the second flange unit against a spring force bias.

Claim 5: the spring element is a cantilevered tab (as shown) extending across an axis of the threaded fastener to flex with increased engagement of the threaded fastener.

Claim 6: the fastener has a non-threaded section (as shown) which would limit an engagement of the threaded fastener with the socket.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stark in view of La See and Petta (U.S. Patent No. 5,987,826).

Claim 2: Stark discloses the claimed invention including a fastening member (Fig. 6: 66) to attach the retention member to the sill, however Stark does not disclose a nail (which would result in a hole in the retention member) as a fastening means. Petta discloses a retaining member (Fig. 7: 92) with a nail (94) holding it in place. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use a nail in combination with the fastening member in Stark (which would result in a hole in the retention member) because a nail is functionally equivalent to the fastening member in Stark and would perform equally as well.

Claims 11, 14 and 17-20 are rejected under 35 U.S.C. 103 as being unpatentable over Plym.

Claim 11: Plym discloses a vision panel comprising first and second flange units ("R", "Q" above respectively) sized to

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frame the opening, sash elements ("S", "T") that extend into the opening and hold a transparent pane therebetween, a spring member (4) attached to the first flange and extending into the opening to support a socket ("X") on a cantilevered tab (as shown), a fastener (7) engages the second flange unit and the socket to draw the first and second flange units and sash elements together against the pane, the fastener includes a head and shank (as shown) and the shank includes a non-threaded section (as shown) between the head and threaded section, the non-threaded section limits a depth of engagement, and a portion of the socket is drawn over a non-threaded section to disengage with the fastener as the threaded fastener is advanced, and the limited depth of engagement provides a predetermined compressive force. While Plym discloses a system with a socket, it does not disclose that the socket is threaded. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to have the socket threaded to facilitate the connection of the threaded portion of the bolt with the framing member.

Claim 14: the cantilevered tab is attached to the first flange, the tab extends across an axis following a length of the threaded fastener, and it would flex with increased engagement of the threaded fastener.

Claim 17: the prior art of record discloses the claimed invention including retention members (equivalent to portion "9" from Fig. 1), but it does not disclose the number of retention members used. It would have been obvious at the time the invention was made to a person having ordinary skill in the art as a matter of duplication of parts to have this limitation because duplication of parts has no patentable significance unless a new and unexpected result is produced. *In re Harza*, 274 F.2d 669 (CCPA 1960). See MPEP §2144.04.

Claim 18: the prior art of record discloses the claimed invention except for the number of holes. It would have been obvious at the time the invention was made to a person having ordinary skill in the art as a matter of duplication of parts to have this limitation because duplication of parts has no patentable significance unless a new and unexpected result is produced. *In re Harza*, 274 F.2d 669 (CCPA 1960). See MPEP §2144.04.

Claim 19: the sash elements include inwardly biased sharp edge portions (see "Z" above as the corner portion is inwardly biased; the forces created by the frame and threaded bolt, as the members are drawn together, results in the members that are inwardly biased; in other words if the pane were not present, the members would be drawn closer to each other, which makes

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them inwardly biased to each other) in contact with the panel and the edge portions will embed in the panel when the panel becomes semi-molten.

Claim 20: as shown, and upper surface of the retention ("W" above) member supports the bottom of the transparent panel (as shown).

Response to Arguments

4. The following addresses applicant's remarks/arguments dated 15 September 2008.

Drawing objections:

Applicant's argument with respect to the drawings is persuasive and the objection is withdrawn.

Claim rejection - 35 USC §112:

Applicant's amendment to the claims overcomes the rejection and it is withdrawn.

Claim rejection - 35 USC §102 and 103:

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection as applicant amended the claims.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William V. Gilbert whose telephone number is 571.272.9055. The examiner can normally be reached on Monday - Friday, 08:00 to 17:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be

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reached on 571.272.6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/W. V. G./
Examiner, Art Unit 3635

/Basil Katcheves/

Primary Examiner, Art Unit 3635